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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/898,989	07/03/2001	John E. Mercer	DCI-15C2	7384

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EXAMINER

SINGH, SUNIL

ART UNIT PAPER NUMBER

3673

DATE MAILED: 01/30/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

2

Office Action Summary

Application No.
09/898,989

Applicant(s)
Mercer

Examiner
Sunil Singh

Art Unit
3673



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 39-96 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 39-96 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on Jul 3, 2001 is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 2 20) ☐ Other:

Art Unit: 3673

DETAILED ACTION

The preliminary amendments filed 7/3/01 have been entered.

Information Disclosure Statement

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the subject matter claimed in claims 45, 59, 73, 87, 50-52, 64-66, 78-80 and 92-94 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Specification

3. The disclosure is objected to because of the following informalities: at page 9 line 17, "locating signal 90" appears to be incorrect; page 12 line 19, "transceiver 152" appears to be

Art Unit: 3673

incorrect; page 13 line 15, the status of the application serial number 08/643,209 needs to be updated. Appropriate correction is required.

4. The abstract of the disclosure is objected to because the word "disclosed" and "means" should be deleted from the abstract. Furthermore, the abstract does not discuss that an arrangement at the drill rig monitors at least one operational parameter and transmits the at least one parameter to a portable device; the abstract should describe this feature since the claims are directed to this particular feature. Correction is required. See MPEP § 608.01(b).

5. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 250 words. It is important that the abstract not exceed 250 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "**means**" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "**The disclosure concerns,**" "**The disclosure defined by this invention,**" "**The disclosure describes,**" etc.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the **first paragraph of 35 U.S.C. 112**:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Art Unit: 3673

7. Claims 45, 59, 73 and 87 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claims 45, 59, 73, 87 call for the portable device to provide an audio indication in response to receipt of a warning; however, the specification is totally devoid of such a teaching; therefore, one skilled in the art would not know how to make and/or use the invention as claimed; furthermore, no drawing shows this feature.

8. Claims 50-52, 64-66, 78-80, 92-94 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The subject matter called for in claims 50-52, 64-66, 78-80, 92-94 is not described in the specification therefore one skilled in the art would not know how to make and/or use the invention as claimed. Furthermore, no drawing substantiates the claimed subject matter in claims 50-52, 64-66, 78-80, 92-94.

9. The following is a quotation of the **second paragraph of 35 U.S.C. 112**:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 3673

10. Claims 39-96 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are **replete** with indefiniteness and antecedent basis errors that are too numerous to mention each one specifically. Applicant should carefully check all the claims to correct all indefiniteness and antecedent basis problems. Some examples are noted.

Claim 39 line 6, "the operational parameter" lacks clear antecedent basis; it appears that it should be --the at least one operational parameter--.

Claim 39 lines 6-7, "for use by the portable device" is confusing because it appears that the operator of the portable device is the one using the "operational data" not the portable device itself.

Claims 53, 67, 81, 95 and 96 are similarly rejected as is Claim 39 above.

Claim 49 line 2, "the status of said drilling mud" lacks clear antecedent basis.

Claim 63 line 2, "the status of said drilling mud" lacks clear antecedent basis.

Claim 68 line 2, "the drill rig" appears as if it should be --the detection arrangement--.

Claim 91 line 2, "the status of said drilling mud" lacks clear antecedent basis.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 3673

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 39-42, 53-56, 67-70, 81-84, 95 and 96 are rejected under 35 U.S.C. 102(b) as being anticipated by Kuckes (US 5513710).

Kuckes discloses a drilling system comprising a detection arrangement at said drill rig (24) for monitoring an operational parameter; a portable device (28) configured for receiving data signal relating to the operational parameter; and a communication arrangement for transferring the data signal from the drill rig (24) to the portable device (28).

13. Claims 39-43, 48-49, 53-57, 62-63, 67-71, 76-77, 81-85, 90-91, 95 and 96 are rejected under 35 U.S.C. 102(b) as being anticipated by Patton (US 5439064).

Patton discloses a drilling system comprising a detection arrangement at said drill rig (20) for monitoring an operational parameter; a portable device ((12), this is construed as a movable trailer, wherein at a drilling site movable trailers are typically what is considered as the office) configured for receiving data signal relating to the operational parameter; and a communication arrangement for transferring the data signal from the drill rig (20,21) to the portable device (12).

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

Art Unit: 3673

such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 43-49, 57-63, 71-77 and 85-91 rejected under 35 U.S.C. 103(a) as being unpatentable over Kuckes '710.

Kuckes discloses the invention substantially as claimed. However, Kuckes is silent about the operational parameter being one of a push force, drilling mud status and wherein a warning is transmitted to the portable device when a minimum/maximum operational parameter is violated. It is well known in the art to transmit operational parameters such as (push force, drilling mud status) of a boring arrangement from a drill rig to an end user and to also transmit a warning to the end user when one of the operational parameter has violated a minimum/maximum value. It would have been considered obvious to one of ordinary skill in the art to modify Kuckes to transmit operational parameters such as (push force, drilling mud status) of a boring arrangement from a drill rig to an end user and to also transmit a warning to the end user when one of the operational parameter has violated a minimum/maximum value as is well known in the art in order to prevent damaging the boring tool.

16. Claims 44-47, 58-61, 72-75 and 86-89 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patton.

Patton discloses the invention substantially as claimed. However, Patton is silent about a warning being transmitted to the portable device when a minimum/maximum operational parameter is violated. It is well known in the art to transmit a warning to the end user when one

Art Unit: 3673

of the operational parameter has violated a minimum/maximum value. It would have been considered obvious to one of ordinary skill in the art to modify Patton to transmit a warning to the end user when one of the operational parameter has violated a minimum/maximum value as is well known in the art in order to prevent damaging the boring tool.

Conclusion

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sunil Singh whose telephone number is (703) 308-4024. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell, can be reached on (703) 308-2151. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-7687.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2168.

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4/2/02


DAVID BAGNELL
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